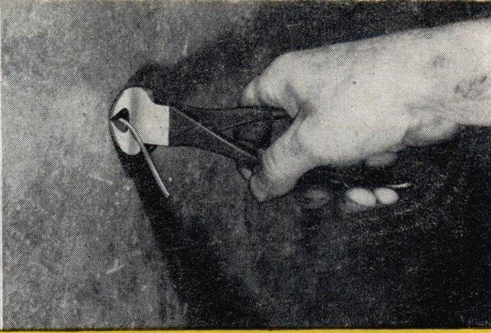
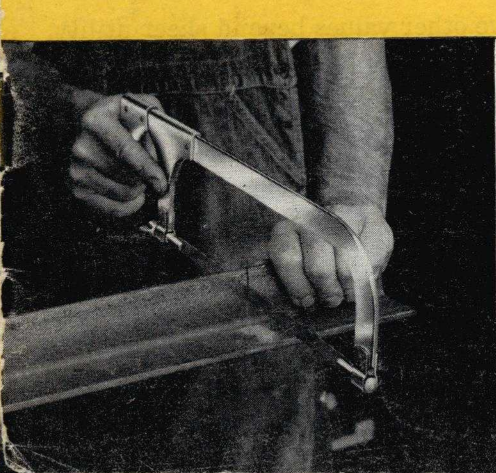
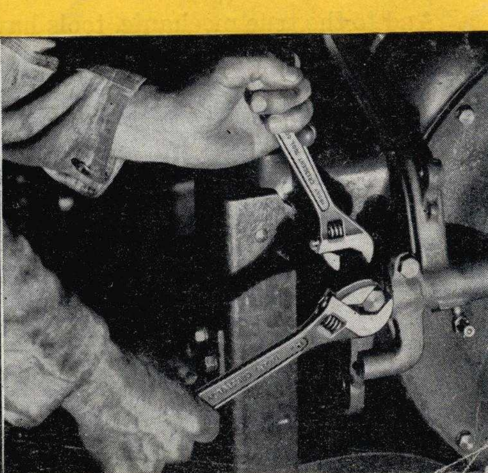


HOW TO USE HAND TOOLS





GOOD TOOLS make good mechanics

Trite though the saying may be, there is probably no truer adage than "Good tools make good mechanics." There is something about a good tool that inspires craftsmanship . . . an indescribable something that helps the average mechanic turn out better than average work. That fact alone more than justifies the slightly higher cost of quality tools on a strictly economic basis.

And to the true mechanic, tools have other values beyond sheer utility. Every real mechanic is a tool connoisseur as well as a craftsman. He is proud of his "collection" because it symbolizes his regard for the craft of his choosing.

So when you buy tools, buy good tools. Select them as critically as you choose your friendships. Know something of the reputation of the people who make them. And then when they are yours, treat them as any gentleman treats a friend. Don't abuse them, give them the ordinary care necessary to preserve their goodness. They will serve you well and tirelessly, long after the price tag has been forgotten.

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DNB 8.00

THIS BOOKLET is designed to be helpful to both amateur and professional mechanics. It provides many useful how-to-do-it ideas as well as basic information on proper selection, care and maintenance. It covers the products made by the Crescent Tool Company, which represent those hand tools most widely used by a broad cross-section of American mechanics. Pages 15 through 20 illustrate and identify the various tools described in preceding pages. Hardware Dealers and Industrial Distributors everywhere sell Crescent and Crestoloy Tools.

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. . THE BEST TOOLS are the

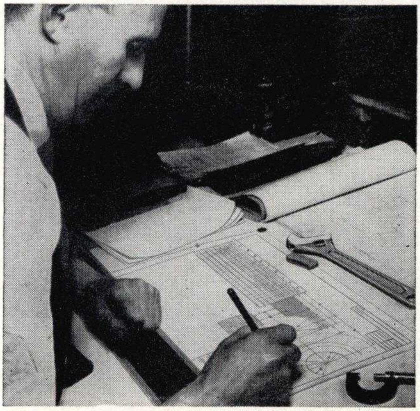


Fig. 2—Crescent quality begins with good design.

Just as the lever and wheel were probably the forerunners of mechanical science, so may hand tools be classed with the beginning of the individual mechanic or artisan. Man's desire to do more and better work was the reason for the first crude tools.

From then on, the spirit of rivalry and competition spurred first one, then another to make a better tool. In a few words, that is how good tools came about. The tools of our present day American mechanic are by far the finest in the world. You can thank ingenuity and our free thinking, free enterprise system for that.

In this mass-production, machine age, hand tools are often overlooked or taken for granted. Actually, they are the connecting link between the craftsman's skill and the production machine. Hand tools are essential in setting-up, adjusting, and maintaining the machines that make America mighty. The manufacture of hand tools is one of our important industries.

Millions are spent annually for research and development alone. At the Crescent factory, you will come across inspectors making rigid and exhausting tests of raw steel before it is accepted.

You will see other inspectors putting new tools through far more torturous tests than they will ever encounter in ordinary use.

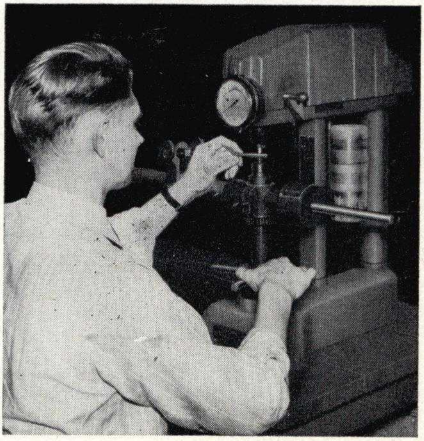


Fig. 3—Testing steel sample before forging.

Cheapest in the long run.

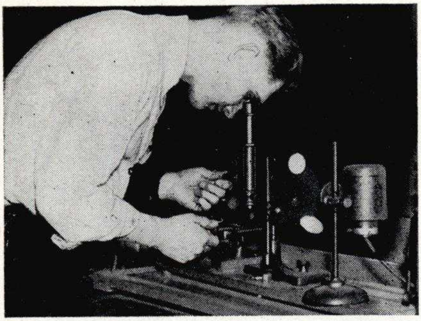


Fig. 4—1200 magnifications reveal the structure of annealed forgings.

This brings us to our point—*The Best Tools are the Cheapest in the long run.* We can put it another way and say—cheap tools are expensive and very often dangerous. Good tools produce better work. They incur less worker fatigue which so often results from using unwieldy, poorly balanced, hard-to-handle tools.

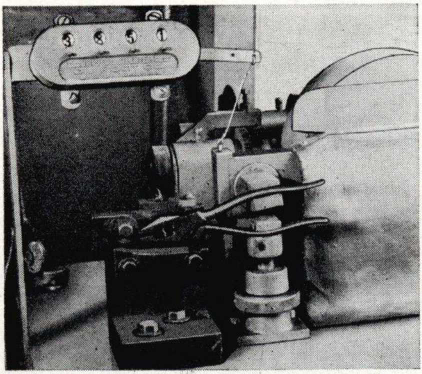


Fig. 5—Destruction test on a Crestoloy Side Cutting Plier.

There is nothing accidental about a Good Tool. The photographs on these two pages give you some idea of the care and precision exercised in the manufacture of Crescent Tools. Innumerable tests—some of which may look superfluous to the average person—are made before, during and after manufacture.

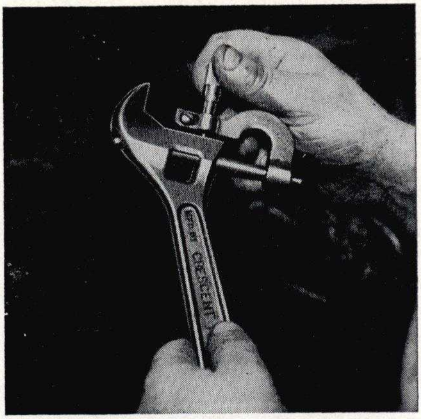


Fig. 6—Checking a milling operation with micrometer gauge.

Should the slightest flaw show up, the imperfect item is immediately consigned to the scrap heap.

When you need tools, buy the best. Take advantage of the experience and knowledge of your hardware dealer. Ask his advice. And remember: "The Best Tools are the Cheapest in the Long Run."

WRENCHES . . . . . . *and how to use them*

A prime rule in using any adjustable wrench is to first adjust it to a snug fit on the nut to be turned. (Fig. 7.) A tightly adjusted wrench is safer since danger of slippage is minimized. A loosely fitted wrench will tend to "round" the corners of hexagonal objects, and may damage the wrench by exerting undue strains on the jaws. Greasy, oil-covered tools are dangerous. Keep handles clean and dry by occasional wiping. Oil should be applied sparingly to moving parts.

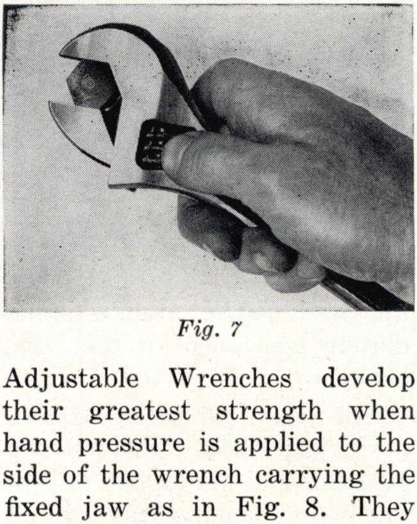


Fig. 7

Adjustable Wrenches develop their greatest strength when hand pressure is applied to the side of the wrench carrying the fixed jaw as in Fig. 8. They can, however, be pulled in either direction on moderate loads, and are frequently "flopped" between swings to gain an angular advantage and permit continuous rotation of nuts or bolts where cramped quarters limit the handle swing.

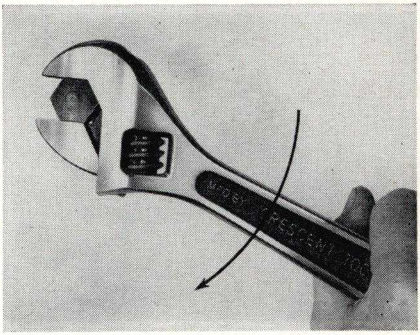


Fig. 8

"Crestoloy" Wrenches, being thinner (and stronger) than "Crescent" Wrenches, are the preferred tools for use in cramped quarters or when adjustable wrenches are used in pairs as in Fig. 9. For extremely heavy loads, Crestoloys are likewise recommended. (See tools illustrated page 15.)

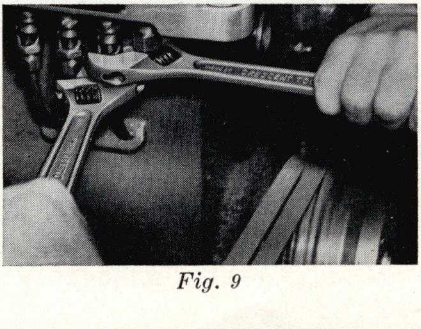


Fig. 9

PLIERS . . . . *and how to use them*

Slip Joint Pliers

Crescent Slip Joint Pliers are a general purpose tool having excellent gripping power over a wide capacity range because of their adjustable jaws. Ideal for holding or turning round pieces. Should not be used on nuts or bolt heads. (See tools illustrated page 15.)

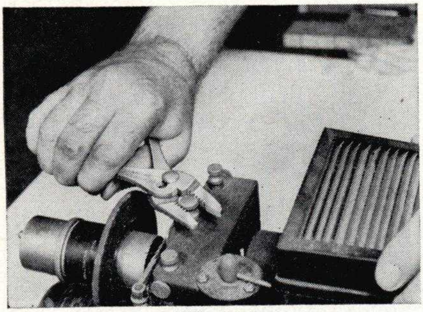


Fig. 10

Skinning Insulated Wire

Fig. 12 illustrates the proper way to grasp a light, diagonal plier. The third and little finger "inside" the handles provide pressure to hold the jaws apart. Pressure of the thumb stabilizes the tool and maintains desired jaw opening.

To skin wire, grasp it as shown with the left hand, as in Fig. 11. Now with plier held, as shown, close the jaws sufficiently to cut through the insulation *only*. Don't cut through the conductor!

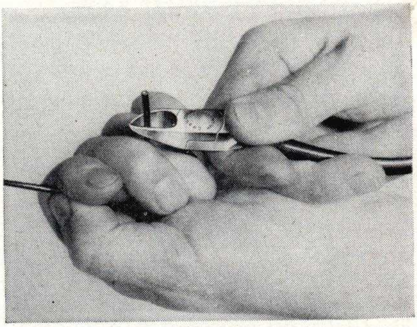


Fig. 11

Now "rock" plier handles toward left wrist and the prying action will strip the insulation from the wire end.

"Cleaning" or brightening of the bare wire is shown in Fig. 12. Close jaws just enough to provide slight pressure and draw cutter blades along the bare wire a few times. Rotate wire with left hand so that the entire circumference is clean. (See tools illustrated page 17.)

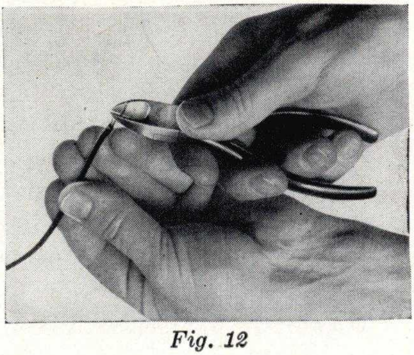


Fig. 12

Removing Cotter Keys

With a heavy diagonal plier, first straighten out spread ends of cotter key sufficiently to permit cutters to "bite" both pieces at one time. With cutters close to nut, sever spread ends with a single cut.

Now grip the head or opposite end of cotter key, as shown in Fig. 13, and with a sideways motion pry the cotter key out. *Don't attempt to pry it out without first cutting off the spread ends.* (See tools illustrated page 17.)

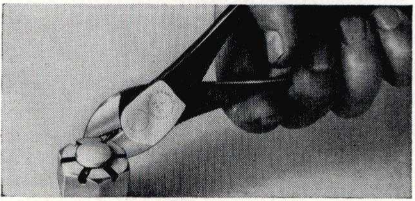


Fig. 13

Removing Headless Nails

A finish or casing nail that has been "set" can be removed from trim or other finished lumber without damage to the surface by pulling it through and out on the reverse side. With an End Cutting Nipper, grip the nail, as shown in Fig. 14, at a point close to the surface. Put sufficient pressure on handles to grip the nail without cutting through. Pry the nail out with a downward pressure on the handles.

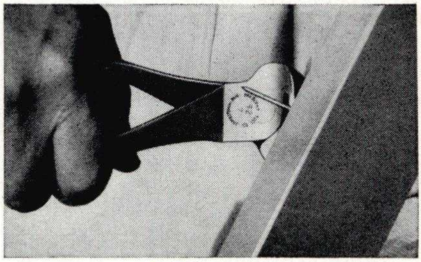


Fig. 14

Where wire must be cut off close to a wall or other flat surface from which it protrudes, use an End Cutting Nipper. Example, cutting form wires on concrete work. (See tools illustrated page 17.)

Making Electrical Connections

When making electrical connections with light wire in tight places, Long Nose Pliers are very useful. Grasp end of wire with plier tip and with left hand holding wire, as shown in Fig. 15, wrap the bare end around terminal screw. (See tools illustrated page 17.)

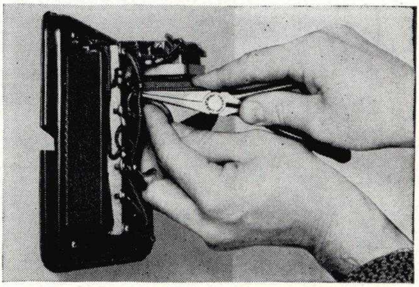


Fig. 15

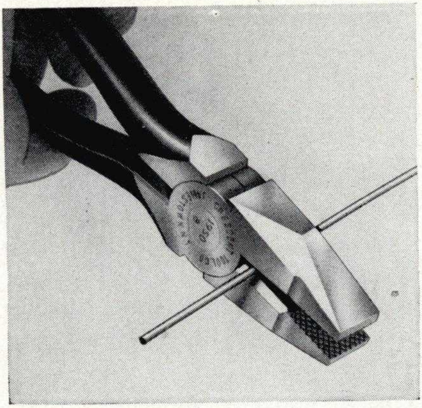


Fig. 16

Heavy Work

Hand tools can be overloaded. For cutting heavy wire use Linemen's Side Cutting Pliers . . . they are designed to meet the toughest assignments. Cut as close as possible to the plier joint; don't "rock" or twist the plier when cutting tough material. (See tools illustrated page 17.)

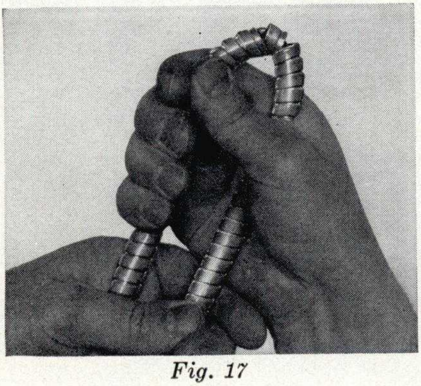


Fig. 17

Cutting BX Cable

Grasp cable with both hands, either side of the point to be cut. Then bend sharply until a spiral breaks open, as in Fig. 17.

Cut the exposed and separated spiral with a pair of heavy diagonal pliers, as in Fig. 18. Now cut through the paper insulation and wires, as in Fig. 19. Finally, squeeze back sharp end of the armor with a pair of Linemen's Pliers. To expose the wires at the end of a piece of BX, break the armor about 4 or 5 inches back from the end, cut through the separated spiral as in Fig. 18. Then slide off the short piece of armor. (See tools illustrated page 17.)

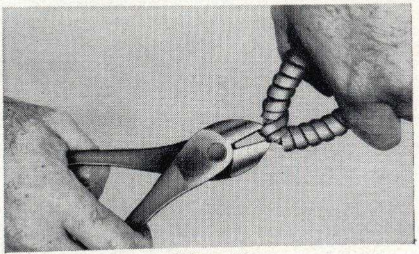


Fig. 18

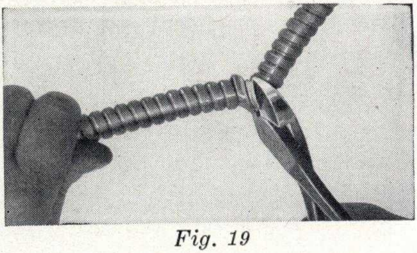


Fig. 19

HACKSAWS . . . . . . *and how to use them*

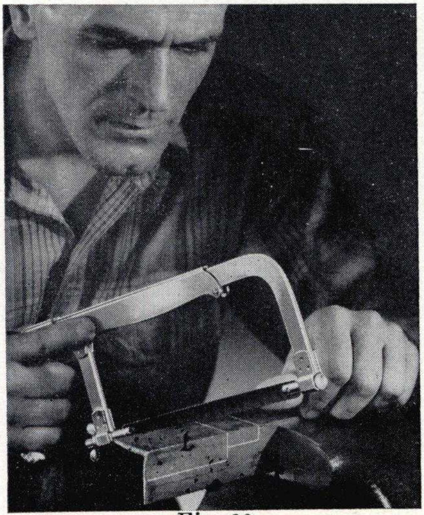


Fig. 20

Use the proper Hacksaw Frame for the job. For average, light work, many mechanics prefer the straight handle type, although others use the pistol grip style for all kinds of work. Heavy cutting requires a heavy duty frame, to provide the proper blade tension. Most Crescent Hacksaws are of the adjustable type, but for certain types of heavy work, where only 12 inch blades are practical, we recommend the non-adjustable, all steel number 1044.

Adjustable, pistol grip style hacksaws are made by Crescent with two types of handle — all steel for general use, or Neoprene for those whose tools may be exposed to extremes of temperature. The Neoprene handle will not get too hot to hold under a hot sun, and will still keep its resiliency when exposed to extreme cold.

Crescent Hacksaws cut better because they are made square and true so that blades will not be subjected to twisting strains. Blade holding parts are accurately made on screw machines and are not merely stamped or pressed out of mild steel. (See tools illustrated on page 18.)

Insert the blade with teeth pointing away from you and tighten so that the blade is well strained, but not to the point where the pins will shear or loosen. Be sure

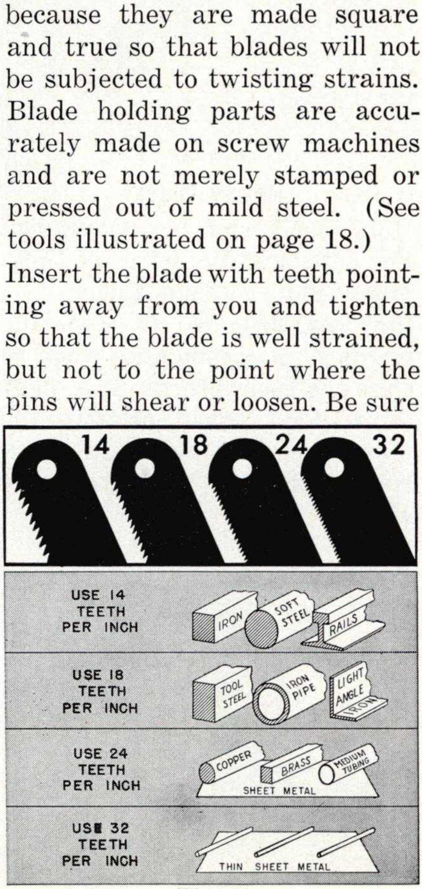


Fig. 21

blade is square and true in the frame. Since edge-hardened blades are flexible, they should be strained tighter than those

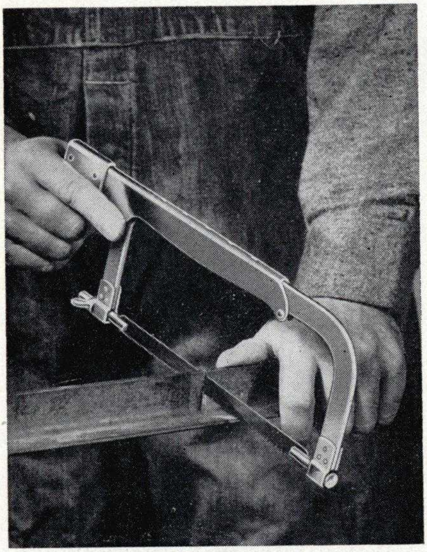


Fig. 22

hardened all over. After the first few strokes it is good practice to retighten a new blade.

Make sure the material to be cut is held rigidly and so placed that a number of teeth engage throughout the cut, as in Fig. 22. Never let the teeth of the blade "straddle" the work. Stripped teeth are bound to result. Keep at least two teeth in contact with the work either by changing angle of contact between blade and work, or by using a blade of finer pitch. "Sandwiching" the work between two pieces of wood, as in Fig. 23, is a good method when conditions permit. Begin the cut carefully but with sufficient pressure to make the teeth actually cut — not merely *rub* on the metal. Lift the saw slightly on the return stroke to avoid dragging the teeth. 40 to 50 strokes per minute is about top speed for efficiency. For faster cutting, increase the pressure — not the speed.

Selection of the proper type of hacksaw blade is important, blades being available with a varying number of teeth per inch, ranging from 14 to 32. The chart shown in Fig. 21 provides an excellent guide to insure that the proper blade is used.

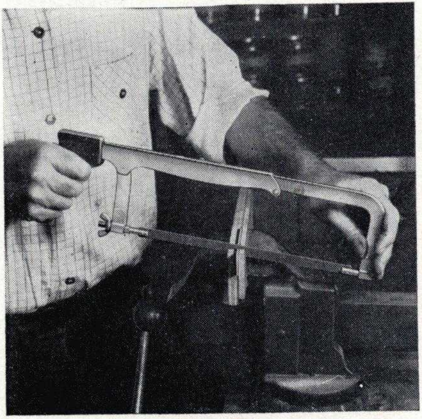


Fig. 23

SNIPS . . . . *and how to use them*

Crescent Snips are made in four styles, illustrated on page 19. The Standard Pattern is the most generally used type and is designed for cutting straight lines or circles of fairly large radius. The Combination Pattern will cut curves as well as straight lines, as will the Heavy Duty Pattern which is designed to provide powerful leverage for heavy work. The Circular Cutting Pattern is designed especially for scroll work and intricate patterns.

In using Snips, first scribe the work to accurately locate the line of cut, using a Crescent Scratch Awl. With the cutting edge of the upper blade directly on the scribed line, begin the cut with the metal well back into the throat of the Snips. Stop the cut just before you reach the end of the cutting stroke and repeat the operation by taking another full "bite". If you permit the Snip to cut clean through on each stroke, a burred or ragged edge will result. Standard Pattern Snips are best for cutting long, straight lines, as in Fig. 24, since the flat inside surface of the blade acts as a guide.

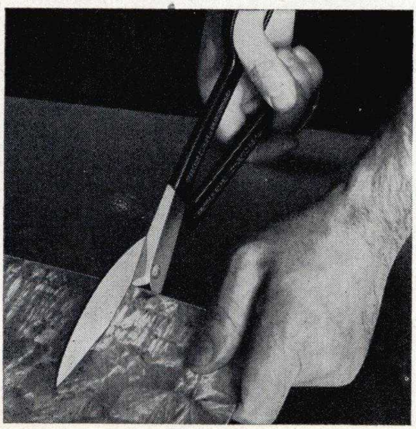


Fig. 24

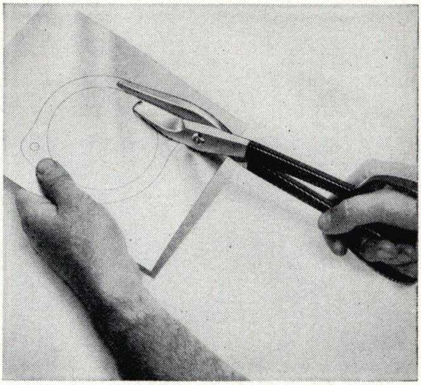


Fig. 25

To remove an inside section from a sheet of metal, as illustrated in Fig. 25, first drill or punch a hole of sufficient size to permit entry of the blade tip. Then spiral out to the scribed line as shown. The Circular Cutting Snips will follow curves and patterns with ease.

PUNCHES, STAR DRILLS . *and how to use them*

Removing Rivets, Pins

To drive out a rivet or pin, as in Fig. 26, select a punch whose point almost fills the hole. Too small a point may upset the end of a soft rivet and make it seize. If the pin or rivet is to be driven through a deep hole use a Pin Punch with a straight shank. Solid Punches are good for *starting* a tight rivet. Use a heavy hammer.

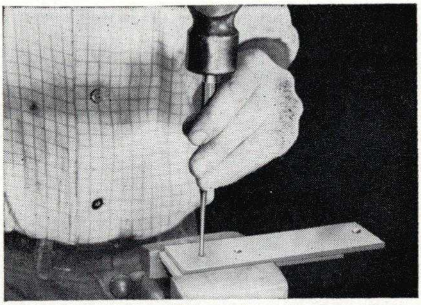


Fig. 26

Use of Center and Prick Punches

Before drilling a hole in metal, always use a Center Punch to locate the hole, as in Fig. 27. Center Punches are ground to an included angle of 60°. Drill will cut quicker and won't wander if started in a punched hole.

A Prick Punch may be used for starting very fine drills. Both Prick and Center Punches are often used to punch "match marks" on two parts before dis-

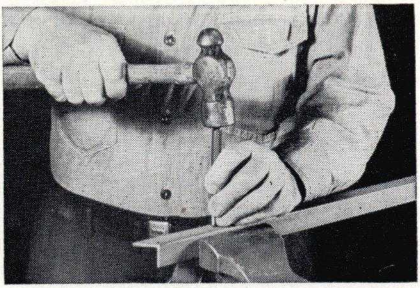


Fig. 27

assembly in order to reassemble in their original position.

Never use a punch with a burred or battered head. Pieces may chip off under hammer blows. Grind off burrs. In regrinding punches be careful not to overheat and destroy temper.

Use of Star Drills

Star Drills are used for making holes in concrete and masonry, as in Fig. 28. Select a drill of desired diameter and use a heavy hammer. Give the drill a 1/4 turn after each blow. (See tools illustrated page 20.)

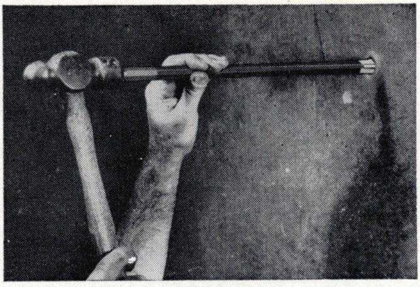


Fig. 28

COLD CHISELS . . . . *and how to use them*

Crescent Cold Chisels are forged from a high quality tool steel with cutting edges or points specially hardened and tempered. Heads are purposely left softer than the balance of the tool as a safety precaution to avoid chipping under hammer blows.

A few simple but important rules govern the use of cold chisels. First of all, cold chisels are designed to cut only metals that are softer than the tool itself.

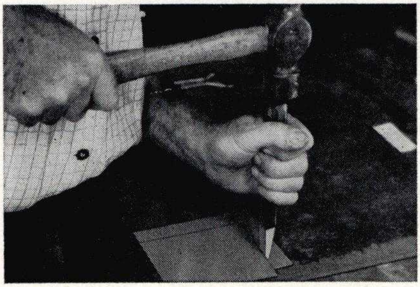


Fig. 29

Always use a heavy hammer. Too light a hammer tends to burr the chisel head and does not sufficiently transmit the force of the hammer blow to the cutting edge.

Crescent Cold Chisels are ground for average use so that the angle between the two bevel surfaces is 60°. When shearing with a cold chisel the vertical angle at which the tool is held should be such that one bevel of the cutting-edge is parallel to the shearing plane. Don't overheat the point in regrinding or the tool will lose its temper.

To cut sheet metal with a back plate, first scribe the line or design and with metal laid on the back plate, as in Fig. 29, cut with a cold chisel held perpendicular to the work. Start with light hammer blows to make an initial mark or groove — then finish with hard blows of a heavy hammer to cut through. Finish rough edges with a file.

To remove a large rivet head, use a Cape Chisel, as in Fig. 30. First cut through the center section, then knock off the two side wings. Light rivet heads can be removed in one operation with a cold chisel wider than the diameter of the rivet head. (See tools illustrated page 20.)

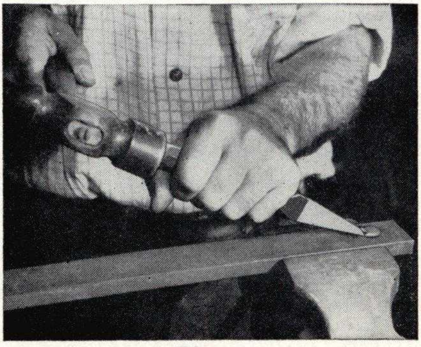


Fig. 30

SCREWDRIVERS . . . *and how to use them*

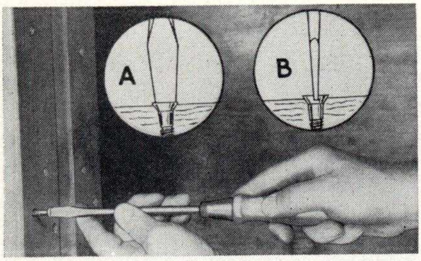


Fig. 31

The common Screwdriver is one of the most mistreated tools we have. Screwdrivers are designed to loosen and tighten screws — not for use as chisel, pry bar or punch. There is a proper screwdriver for every job.

Select a Screwdriver with the proper width of blade for the screw to be turned. Keep the screwdriver shank as nearly in line as possible with the length of the screw. Fig. 31, with insets A and B, illustrates these points.

When working between obstructions use a short screwdriver rather than a long screwdriver held at an angle. When inserting a screw in a deeply countersunk hole, use a Cabinet Screwdriver with a point of the same diameter as the shank. This same screwdriver is the one to use for electrical work where limited clearances will not admit a wide blade.

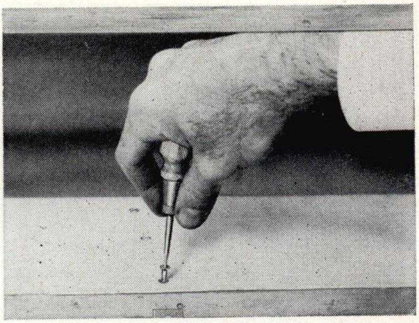


Fig. 32

If you want to start a "frozen" screw or tightly set up a large one, use a heavy, square bladed screwdriver and a Crescent wrench, as in Fig. 33. Be sure to apply sufficient end pressure on the handle to hold the blade in the screw slot. (See tools illustrated page 19.)

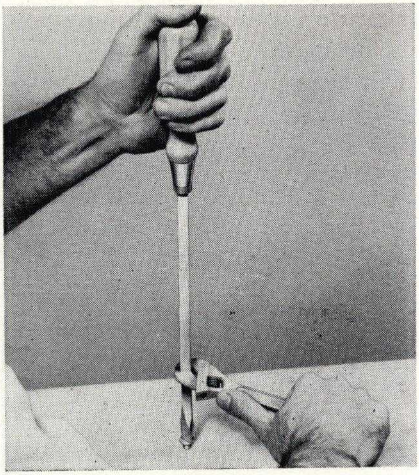


Fig. 33

SCRATCH AWLS . . . *and how to use them*

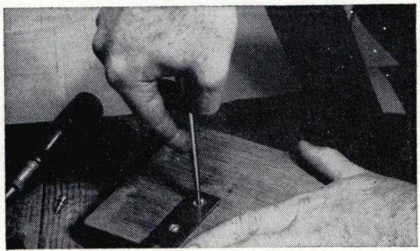


Fig. 34

As an Awl

For piercing holes in any relatively soft material — wood, leather, fabric, fibre, etc. — the Crescent Scratch Awl is an ideal tool. A steady pressure with the palm of the hand, as in Fig. 34, will make an accurately located hole in any soft material.

As a Scriber

For scribing hard surfaces, the Scratch Awl should be tilted slightly sideways, as in Fig. 35, in order that the extreme point will scribe close to the straightedge or rule. Maintain this same side angle while scribing.

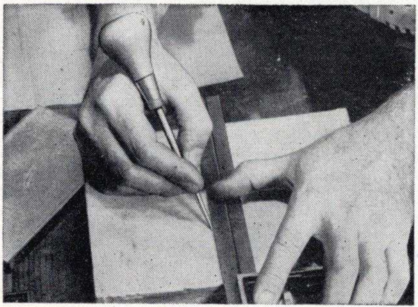


Fig. 35

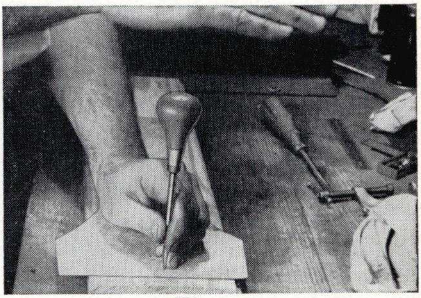


Fig. 36

As a Punch

The Scratch Awl may be used as a Prick Punch or for piercing holes. Used as a Prick Punch, a light hammer blow is best and won't injure the handle since the blade extends clear through. For piercing holes, either a hand blow, as in Fig. 36, or steady hand pressure may be used. Use a wood block beneath the metal.

As a Drift

As a drift or aligning punch for lining up bolt or rivet holes in light work, the Scratch Awl is very useful. (Fig . 37.) (See tools illustrated page 20.)

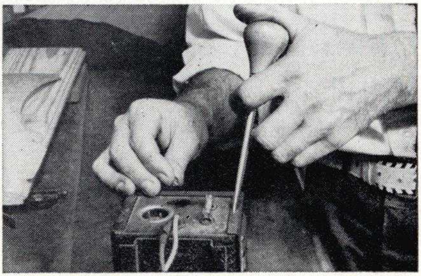
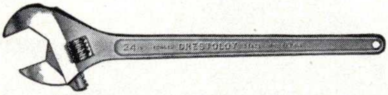


Fig. 37

POPULAR CRESCENT TOOLS

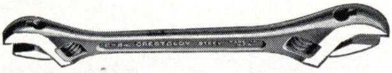
Crestoloy Wrench—4 to 12″

No. AC112—12″. Also in 4, 6, 8 and 10″ sizes. A light, thin wrench of exceptional strength. Crestoloy steel.



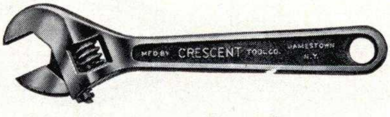
Crestoloy Wrench—15 to 24″

No. AC124—24″. Also in 15 and 18″ sizes. Forged of tough Crestoloy steel, these sizes have tapered handle as shown.



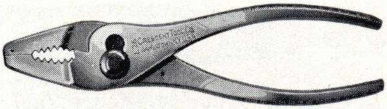
Double End Crestoloy Wrench

No. BC1810—8-10″. Also in 4-6″, 6-8″ and 10-12″ sizes. Light, thin, extra strong — forged from Crestoloy steel.



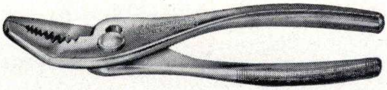
Crescent Wrench

No. A112—12″. Also in 4, 6, 8, 10, 15 and 18″ sizes. Forged from carbon steel, slightly heavier than the Crestoloy wrench.



Thin, Straight Nose Pliers

No. L26—6″. Also in 5, 8 and 10″ sizes. A thin-jawed, slip joint plier for close-quarters work.

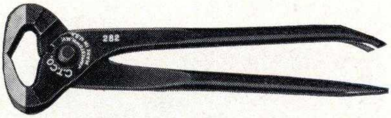


Thin, Bent Nose Pliers

No. J26—6″ size only. Nose is bent to an angle of 30° for certain close-quarters work.

MoToR KiT Combination Pliers

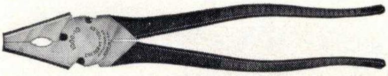
No. G26—6″. Also in 5, 8 and 10″ sizes. A top-quality, all-purpose, slip joint plier. Also the "H" line in machine polished finish.



Carpenter's Pincers

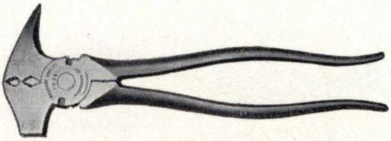
No. 282—6, 8 and 10″ sizes. Powerful nippers, button's cutter, tack claw and screwdriver point combined in one tool.

POPULAR CRESCENT TOOLS



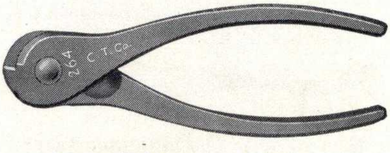
Combination Plier and Fence Tool

No. 1000—8, 10 and 12″ sizes. A general purpose plier with three button's cutters, pipe grip and teeth in tip of nose.



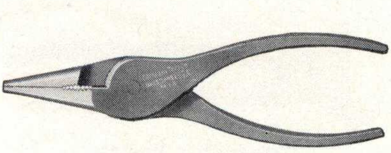
Crescent Fence Tool

No. 1936—10½″ size only. Combines staple puller, hammer, wire cutter in a powerful leverage plier.



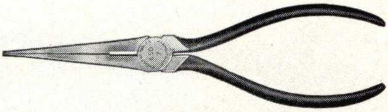
Wire Cutting Pliers

No. 264—5½″ size only. Reverse tapered jaws grip wire while cutting. A serviceable tool for heavy duty wire cutting.



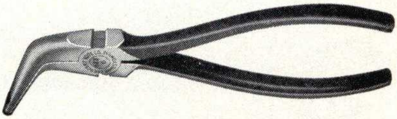
Crescent Long Nose Pliers

No. M-16—6″ size only. A heavy duty, long nose plier with a shear-type wire cutter.



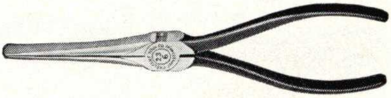
Long Flat Nose, S. C. Pliers

No. 650—7″ size only. Forged of Crestoloy steel its long, thin, flat nose has greater strength and gripping ability. Keen side cutters.



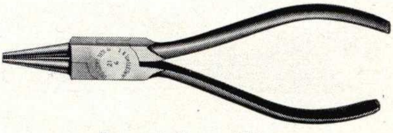
Curved Needle Nose Pliers

No. 888—6″ size only. Forged of Crestoloy steel. The nose of this plier is bent at an angle for reaching difficult places.



Duck Bill Pliers

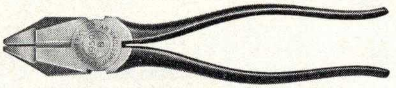
No. 23—7″ size only. Forged of Crestoloy steel—similar to No. 650 but lighter and without side cutter.



Round Nose Pliers

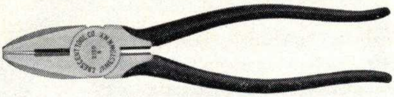
No. 21—4 and 6″ sizes. Forged of Crestoloy steel — rounded nose on both jaws. Used for radio, electrical and jewelry work.

POPULAR CRESCENT TOOLS



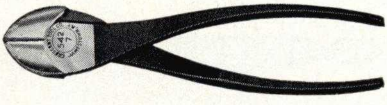
Linemen's Side Cutting Pliers

No. 1950—6, 7 and 8″ sizes. Forged of Crestoloy steel — a heavy duty, side cutting plier widely used by linemen and electricians.



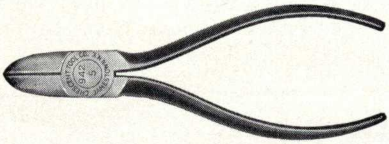
Linemen's Round Nose Pliers

No. 2150—8″ size only. Forged of Crestoloy steel. Lighter and more streamlined than No. 1950, with hand-honed cutting edges. A heavy duty plier.



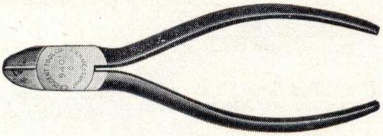
Heavy Diagonal Cutting Pliers

No. 542—7″ size only. Forged of Crestoloy steel—an extremely powerful diagonal cutter for general service.



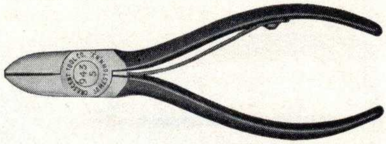
Light Diagonal Cutting Pliers

No. 942 — 4, 5, 5½ and 6″ sizes. Forged of Crestoloy steel. Used by telephone, radio and electrical workers.



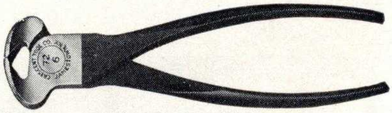
Short Nose Diagonal Cutting Pliers

No. 940—6″ size only. Forged of Crestoloy steel—similar to No. 942 except that short, stubby nose provides more cutting power at extreme end.



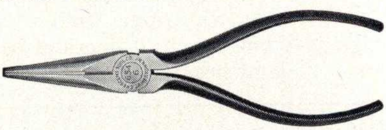
Spring Opening Diagonal Cutting Pliers

No. 943—5″ size only. Forged of Crestoloy steel — spring between handles forces jaws apart. Otherwise very similar to No. 942.



End Cutting Nippers

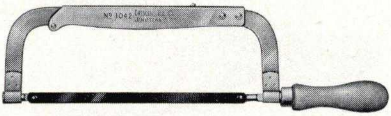
No. 72—6 and 7″ sizes. Forged of Crestoloy steel — a powerful leverage tool with wide blades and generous clearance in the throat.



Long Nose Side Cutting Pliers

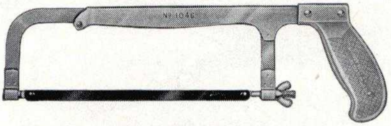
No. 654—6 and 7″ sizes. Forged of Crestoloy steel—a popular tool with keen side cutters for radio and telephone work. Same tool, no cutter, No. 1033 — 6 and 7″.

POPULAR CRESCENT TOOLS



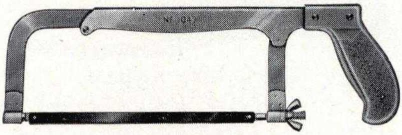
Crescent Hacksaw Frame

No. 1042 — Adjustable 8-12". A light service frame having 2½" depth of cut. Straight, hard maple handle.



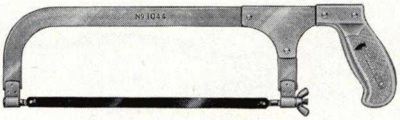
Crescent Hacksaw Frame

No. 1046—Adjustable 8-12". An all steel adjustable frame with pistol grip style handle. A durable hacksaw having 2½" depth of cut.



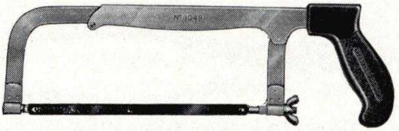
Crescent Hacksaw Frame

No. 1047—Adjustable 8-12". An all steel adjustable frame similar to No. 1046 but with 3¼" depth of cut and made of heavier stock.



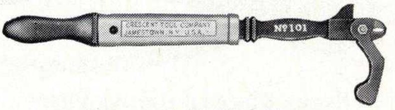
Extra Heavy Duty Frame

No. 1044—10 and 12" sizes. An all steel, non-adjustable frame designed for severe service. Will accommodate power saw blades.



Crescent Hacksaw Frame

No. 1049—Adjustable 8-12". Similar to No. 1047 except that pistol grip is made of Neoprene, a tough composition with the frame extending all the way through the handle.



Crescent Nail Puller

No. 101—20" overall. A heavy duty nail puller equipped with box chisel and strap cutter. Drop-forged jaws, made in box joint style, keep them in perfect alignment. Also No. 1, 13.

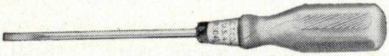
REPAIR PARTS FOR CRESCENT TOOLS

Available at all times to replace parts lost or damaged. For Wrenches, Jaws, Knurls, Pins and Springs. For Pliers, Nuts and Bolts. For Snips, Nuts and Bolts. For Hacksaws, Posts, Tension Screws and Wing Nuts. For Nail Pullers, Long Jaws, Short Jaws, Rammers, Nuts and Bolts.

POPULAR CRESCENT TOOLS

Crescent Screwdrivers

No. K-306 — 6″ blade, 12″ overall. Also in blade lengths 2 to 12″. General purpose type for home or shop use. Blades hardened full length. Ferrule turned, not pressed. Hard maple handle cannot turn or work loose from blade.



Cabinet Screwdrivers

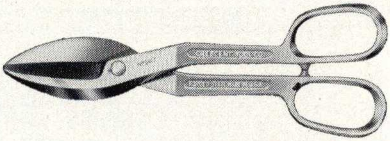
No. K-506½ — 6½″ blade, 10½″ overall. Also in blade lengths 2½ to 12½″. Called Electricians Screwdrivers also. Blades are hardened full length and have no flare at the point. Typical Crescent quality construction throughout.

Crescent Screwdrivers

No. K-406 — 6″ blade, 12″ overall. Also in blade lengths 2 to 12″. Similar to K-300 series except that rod extends clear through the handle. Ferrule turned from solid bar and forced onto blade under heavy pressure.

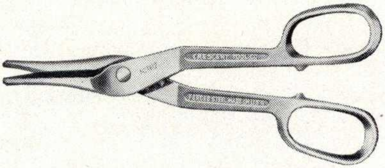
Square Rod Screwdrivers

No. K-606 — 6″ blade, 12″ overall. Also in blade lengths 2 to 12″. A heavy duty screwdriver with square rod blade extending clear through handle. Square blade permits use of a wrench for increased turning power.



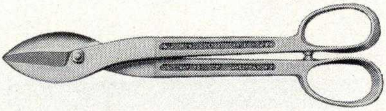
Standard Pattern Snips

No. S-412 — 12¾″. Also 7 other sizes from 7 to 14″. Forged of special steel with blades ground on special machines and induction hardened.



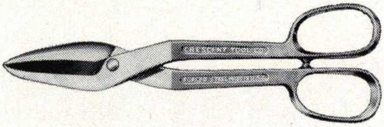
Circular Cutting Snips

No. T-412—12¾″. Also 7″ size. Designed for cutting out intricate patterns and curves. They cut smoothly and leave the metal unbent.



Heavy Duty Snips

No. U-416 — 16¼″. Designed for very severe service with powerful leverage. Cuts curves as well as straight lines. Crescent quality throughout.



Combination Pattern Snips

No. U-412—12¾″. Combines some features of both Crescent's "S" and "T" Snips. Will cut curves as well as straight lines.

POPULAR CRESCENT TOOLS

Crescent Center Punches

No. 486—4 sizes, ¼ to ½″ diameter. A tough and serviceable tool which belongs in every tool kit. Drop-forged from tool steel, specially hardened and tempered.

Crescent Prick Punches

No. 487 — 5/16″ and ⅜″ diameter. Used extensively for marking, this tool has a sharp, tough point. Drop-forged from tool steel, specially hardened and tempered.

Crescent Solid Punches

No. 489—9 sizes, with points 3/32 of an inch to 7/16 of an inch. A general purpose tool drop-forged from tool steel, specially hardened and tempered.

Crescent Cold Chisels

No. 160—8 sizes, with cutting edges ¼ to 1″. A keen, tough cutting edge designed for hard service. Drop-forged from tool steel, specially hardened and tempered.

Diamond Point Chisels

No. 164—5 sizes, with cutting edges ¼ to ⅝″. Designed for severe service, these chisels are drop-forged from tool steel, specially hardened and tempered.

Crescent Star Drills

No. 161—11 sizes, from ¼ to 1¼″—12 and 18 inch lengths. Hand-forged from high carbon steel, specially hardened and tempered. Will drill through concrete, rock or brick.

Crescent Cape Chisels

No. 165—6 sizes, with cutting edges ¼ to ¾″. A very serviceable, heavy duty tool, drop-forged from tool steel, specially hardened and tempered.

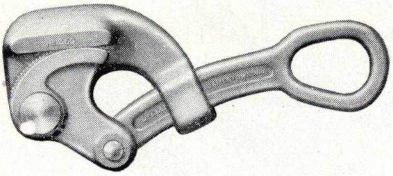
Crescent Wood Chisels

No. 175—3 sizes, ¾, 1 and 1¼″. A heavy duty, all steel chisel designed for rough work. Blade hardened throughout to withstand repeated sharpening.

Crescent Scratch Awls

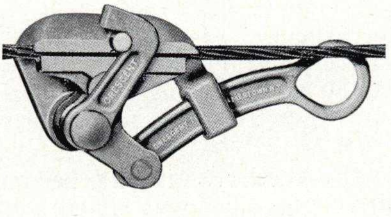
No. 73—6⅝″ overall. An ideal tool for scribing hard surfaces. Also useful as a hand punch. Easily resharpened.

CRESCENT LINEMAN'S TOOLS



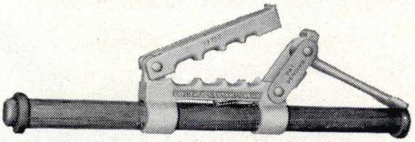
Crescent Haven's Grips

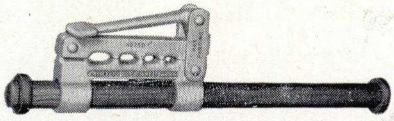
Recently redesigned and thoroughly tested in actual service. Forged from alloy steel and fully heat-treated. Extra heavy construction with solid loop which cannot pull out and large eye to accommodate heavy hooks or rope. Cadmium plated. Two sizes: No. 368, ¼″ maximum opening, 2500 lbs. safe load; No. 369, ½″ maximum opening, 5000 lbs. safe load.



Crescent Wire Grips

An improved drop-forged grip which can't jam, won't slip, yet releases instantly — individually tested to full load capacity. Cadmium plated. Four sizes, each made with either regular (serrated) jaws or smooth jaws for aluminum wire. No. 383 with 5/16″ maximum opening, 5000 lbs. safe load; No. 384 with ½″ opening, 7500 lbs. safe load; No. 385 with ¾″ opening, 10,000 lbs. safe load; No. 386 with 1 1/16″ opening, 12,500 lbs. safe load.





Crescent Sleeve Wrenches

An improved wrench which assures 90-98% perfect joints. Metal parts are cadmium plated, drop-forged steel . . . handles of hickory impregnated with linseed oil. Made in various sizes for any sleeve (single or double tube) up to and including No. 3/0 solid copper, No. 2/0 stranded copper, or No. 1/0 ACSR.

Crescent Staple Puller

Designed to remove staples from ground wire shields without damage to shield or staple. Forged steel jaws, cadmium plated. Rubber grip on handle. One size, No. 15, 20″ overall, weight 3¾″ lbs.

HAVEN'S GRIPS . . . *and how to use them*

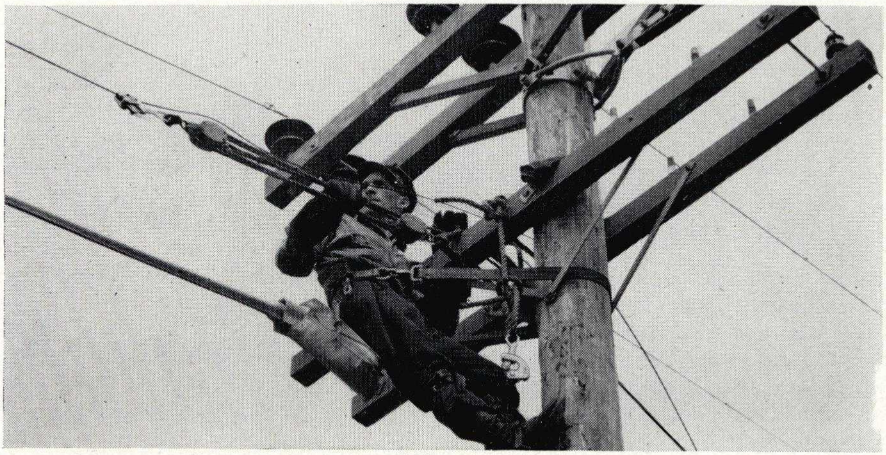


Fig. 38

Crescent's No. 368 and 369 Grips are an improved redesign of the old time Haven's Grip. This type of grip holds well, but exerts considerable localized pressure on the wire. For that reason it should be used only on hard material — like guy wire and messenger cable.

A typical application of this grip in everyday line work is illustrated above. Being of extremely rugged construction, it needs little care beyond occasional oiling of bearing surfaces and cleaning of jaw teeth. The most common cause of slippage in any wire grip is dirty jaws whose teeth or serrations have become filled with insulation (Fig. 41). Jaws can be easily cleaned with benzol (or other solvent) and a wire brush.

If the teeth eventually become dull, Crescent Haven's Grips can be returned to the factory for jaw replacement. (See tools illustrated page 21.)

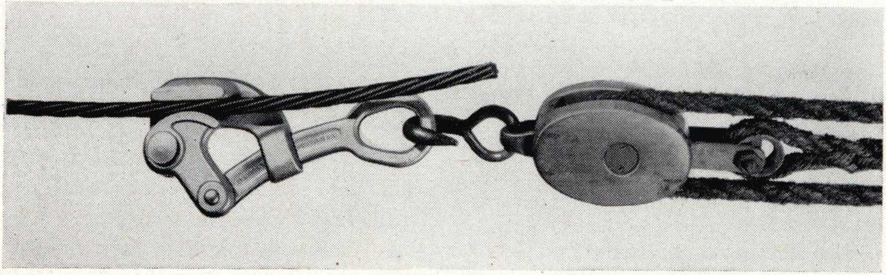


Fig. 39

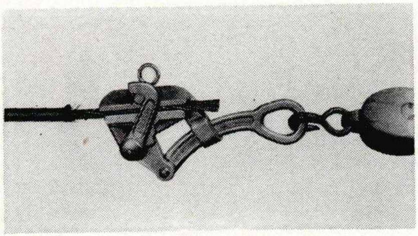


Fig. 40

Crescent's No. 383 Grips are designed to provide an all-purpose wire grip which cannot slip, will not jam, yet will release instantly after being under heavy load. The jaw hook not only provides a safety feature which prevents the grip from falling off the line, but it adds greatly to the operating strength of the grip. The jaw hook should always be closed when the grip is under load.

Since this grip has no spring, it can be "ratcheted" by pushing beyond arm's reach with a pole for a series of "bites". The eye for use with hot line hooks is now standard on these grips but can be removed by unscrewing it.

These grips are made in four sizes (Nos. 383, 384, 385 and 386) with the safe working load stamped on each. All sizes are available with regular (serrated) jaws or with smooth jaws for use on aluminum wire. Smooth jaws should always be used with aluminum wire and the maximum wire capacities listed in the Crescent Catalog should never be exceeded with a particular size of grip. Do not place the grip too close to the end of the wire when starting to pull. This is especially true when pulling against a sleeve where the wire has been spliced, as it will cause the wire to bunch up.

When pulling weatherproof wire, the insulation should be removed so jaws will grip the bare conductor as shown in Fig. 40. This is important, because while these grips will hold tightly on some types of insulation, the insulation itself will slide on the wire, resulting in the wire dropping. On other types of wire, the grip will slip on the insulating material itself, so that the wire cannot be pulled into position. Other operating precautions to be observed are occasional oiling and frequent cleaning of jaw teeth as mentioned on page 22. (See tools illustrated page 21.)

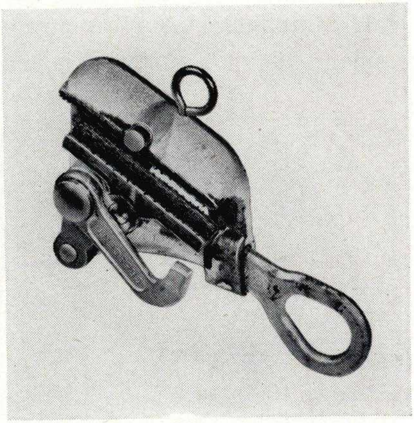


Fig. 41

SLEEVE WRENCHES . . *and how to use them*

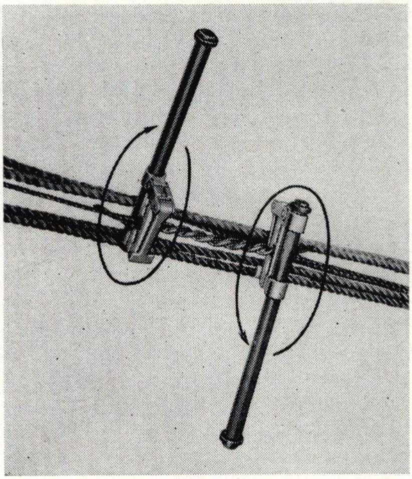


Fig. 42

Crescent Sleeve Wrenches not only produce a 90-98% perfect joint but they definitely reduce working hazards. Their oil-impregnated hickory handles provide excellent insulation, preventing flash if a hot wire is contacted. The design of their openings is such that maximum strength of joint is assured.

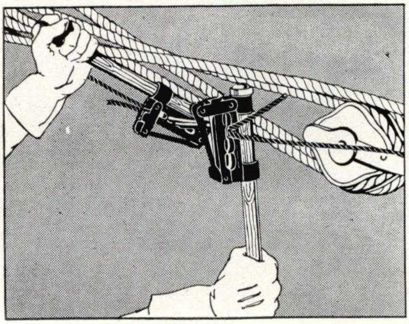


Fig. 43

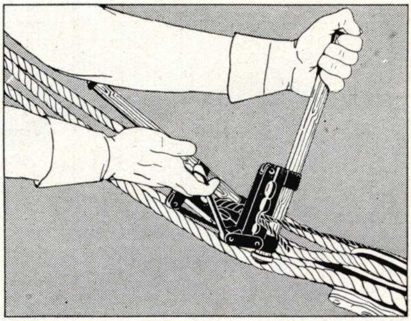


Fig. 44

No. 750 Sleeve Wrenches are used in pairs — one clamped at each end of the sleeve, with the conductors to be joined inserted in the sleeve, as shown in Fig. 42. As many as six full turns can be made without damage to the sleeve.

The sliding handle permits clearance of tackle for continuous rotation of the wrench without unclamping as seen in Fig. 43. When the joint is completed, the wrench is readily released with one hand as illustrated in Fig. 44.

No. 750 hangs securely in the lineman's belt and requires no maintenance beyond occasional oiling of the joints. (See tools illustrated page 20.)

NO. 15 STAPLE PULLERS . *and how to use them*

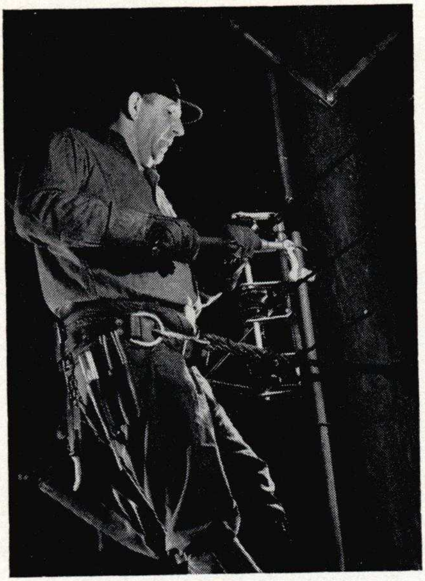


Fig. 45

This time and labor saving tool enables linemen to easily remove staples holding ground wire molding in place without crushing the molding, or ruining the staple. The lever arm of No. 15 Staple Puller has legs which straddle the molding (Fig. 46) so that all pressure is exerted against the pole and no damage is done to the molding.

Sharp jaws grip the staple with a slip-proof grip. The powerful leverage of the long handle, combined with proper distance from staple to fulcrum, make it possible to easily remove these large staples without bending so that they may be used again.

This tool requires no maintenance beyond occasional oiling of the joint. (See tools illustrated page 21.)

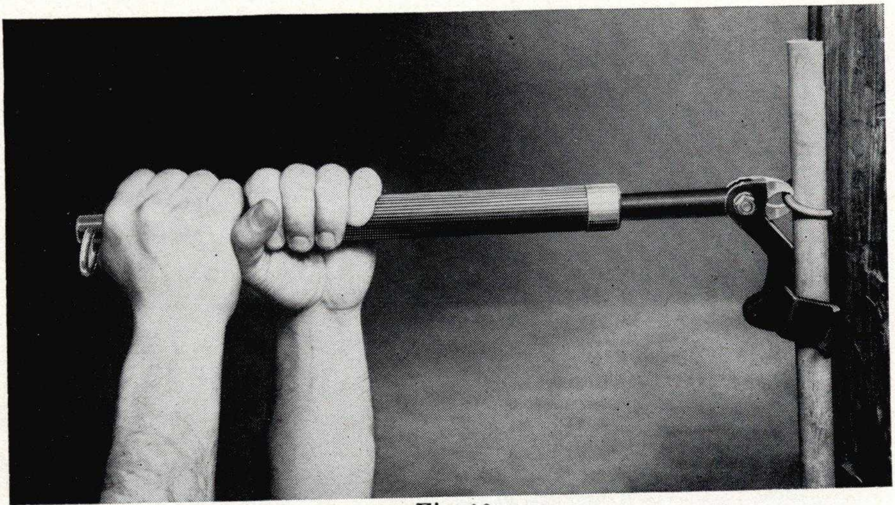


Fig. 46

CRESCENT INSULATED HANDLES

Insulated Wrenches

12 inch with special 1½″ capacity

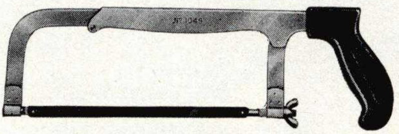
Heavy Tenite insulation which repeated tests have shown to have a very high dielectric strength, as well as great toughness. This insulation will stand up under a surprising amount of rough treatment without chipping or cracking.

Ideal tools for linemen. More than ample strength for all requirements with the toughness and long life which is the distinguishing characteristic of Crestoloy Wrenches.

FINISH: Chromium plated. Transparent blue Tenite insulation molded on handle.

Number	Size	Capacity	Weight, Packed
AC112-INS.	12″	1½″	26 oz.

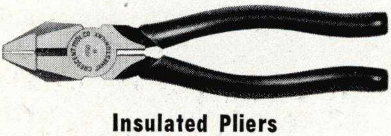
Packed one in a box. (See tools illustrated page 15.)



Insulated Hacksaw Handles

The handles now used on 1048 and 1049 hacksaw frames are made of Neoprene. It is entirely different from and decidedly superior to any of the plastics now being used for handles. It has the feel and look of natural rubber, being warm and resilient to the touch, but with none of rubber's objectionable features. It is impervious to oil and acids and will stand temperatures of one hundred degrees below zero without becoming brittle or two hundred degrees above without becoming soft.

Under all conditions, it has high dielectric value or insulation against electricity. It will not break if dropped and will stand more abuse than any type handle we have ever tested with the exception of the metal handles on our 1044, 1046 and 1047 hacksaw frames. (See tools illustrated page 18.)



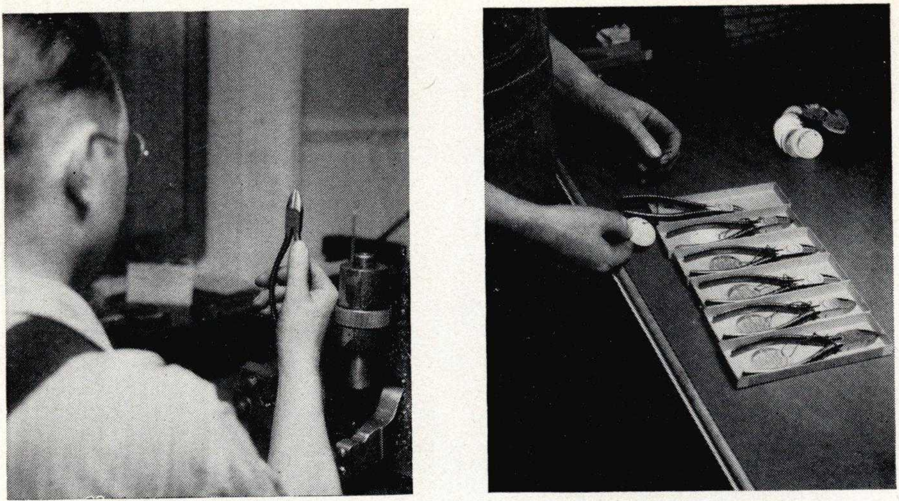
Insulated Pliers

Several of the pliers in the Crescent-Crestoloy line can be supplied with insulating grips made of Tenite. Tests have shown this material to have a high dielectric value and we recommend them for those who have need for an insulated plier.

Number 50, available in 6, 7 and 8 inch.
Number 1950, in 6, 7 and 8 inch.
Number 2150, in 8 inch size only.
Number 3800, in 6, 7 and 8 inch.

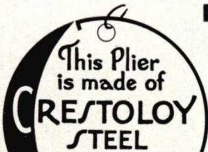
These grips are knurled for firm gripping and will not slip around or off the handles of the pliers. (See tools illustrated page 17.)

CRESTOLOY PLIERS . . *are individually tested*



Crestoloy Pliers are individually tested and tagged before packing.

Crestoloy Pliers take all the guesswork out of plier buying, because Crescent has taken all the guesswork out of plier making. Rigid specifications establish the material, design, workmanship, tests and inspection of these better tools. Strict adherence to these specifications is maintained by continuous tests and relentless inspection of the individual tools. Every plier carries the Crestoloy tag certifying that it has been individually tested.



THIS TAG attached to a CRESTOLOY Plier certifies that it has passed the rigid tests which every CRESTOLOY Plier must pass before being placed in stock. This assures the purchaser that his CRESTOLOY Plier is ready for the hardest kind of service.

WIRE SIZES . . . . . . *and other information*

Cable Size	ACSR Stranding	Diameter (inches)
No. 8	6 x 1	.158
7	6 x 1	.177
6	6 x 1	.198
5	6 x 1	.223
4	6 x 1	.250
4	7 x 1	.257
3	6 x 1	.281
2	6 x 1	.316
2	7 x 1	.325
1	6 x 1	.355
1/0	6 x 1	.398
2/0	6 x 1	.447
3/0	6 x 1	.502
4/0	6 x 1	.563
266800 CM	26 x 7	.642
266800	6 x 7	.633
300000	30 x 7	.700
300000	26 x 7	.680
336400	30 x 7	.741
336400	26 x 7	.721
397500	30 x 7	.806
397500	26 x 7	.783
477000	30 x 7	.883
477000	26 x 7	.858
500000	30 x 7	.904
556500	30 x 7	.953
556500	26 x 7	.927
605000	26 x 7	.970
605000	54 x 7	.953
636000	30 x 19	1.019
636000	26 x 7	.990
636000	54 x 7	.977
666600	54 x 7	1.000

No. of Wire Gauge	American or B & S	Birmingham or English (B.W.G.)
0000 (4/0)	.460	.454
000 (3/0)	.40964	.425
00 (2/0)	.3648	.380
0 (1/0)	.32486	.340
1	.2893	.300
2	.25763	.284
3	.22942	.259
4	.20431	.238
5	.18194	.220
6	.16202	.203
7	.14428	.180
8	.12849	.165
9	.11443	.148
10	.10189	.134

Decimal Equivalents			
1/64	.0156	33/64	.5156
1/32	.0312	17/32	.5312
3/64	.0469	35/64	.5469
1/16	.0625	9/16	.5625
5/64	.0781	37/64	.5781
3/32	.0937	19/32	.5937
7/64	.1094	39/64	.6094
1/8	.125	5/8	.625
9/64	.1406	41/64	.6406
5/32	.1562	21/32	.6562
11/64	.1719	43/64	.6719
3/16	.1875	11/16	.6875
13/64	.2031	45/64	.7031
7/32	.2187	23/32	.7187
15/64	.2344	47/64	.7344
1/4	.25	3/4	.75
17/64	.2656	49/64	.7656
9/32	.2812	25/32	.7812
19/64	.2969	51/64	.7969
5/16	.3125	13/16	.8125
21/64	.3281	53/64	.8281
11/32	.3437	27/32	.8437
23/64	.3594	55/64	.8594
3/8	.375	7/8	.875
25/64	.3906	57/64	.8906
13/32	.4062	29/32	.9062
27/64	.4219	59/64	.9219
7/16	.4375	15/16	.9375
29/64	.4531	61/64	.9531
15/32	.4687	31/32	.9687
31/64	.4844	63/64	.9844
1/2	.5	1	1.0

CRESCENT TOOL COMPANY

In this modern factory at Jamestown, N. Y., millions of Crescent Tools are manufactured every year. Crescent production accounts for a very substantial percentage of the entire U. S. sales of adjustable wrenches and pliers.

CRESCENT TOOLS
Give Wings to Work

Sign of the Artisan
Symbol of Excellence

Designed
and Printed
in Jamestown
N.Y., U.S.A.
by the
CRESCENT
Organization

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